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09/440,529 11/15/99 PITRODA

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EXAMINER

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ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.

09/440,529

Applicant(s)

Pitroda et al

Examiner

Tremblay

Group Art Unit

2165

---The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address---

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- ☒ Responsive to communication(s) filed on 4/27/01
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

### Disposition of Claims

- ☒ Claim(s) 1-39 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-39 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

\*Certified copies not received: \_\_\_\_\_

### Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Applicant: Pitroda et al.

Filing date: 11/15/99

### ***Drawings***

5           The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "entire housing" which is "reader insertable" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Applicant has not shown any embodiment in the drawings in which the entire housing may be placed in the reader. Since this is a point argued by Applicant in favor of patentability  
10           over the prior art, Examiner finds it necessary to illustrate this feature, or cancel the corresponding claims.

### ***Double Patenting***

          A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful  
15           process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

20           A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

          Claims 25-39 are provisionally rejected under 35 U.S.C. 101 as claiming the same  
25           invention as that of claims 25-39 of copending Application No. 09/587,998. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

          The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of copending Application No. 09/587,998. Although the conflicting claims are not identical, they are not patentably distinct from each other because the amendments expressly recite features which would have been understood from the original claims, when the latter are read in light of the specification. Assuming, for the sake of argument, that the claims would not have been read as incorporating the newly recited limitations, Examiner alternatively finds that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to adapt the receive circuit "to receive information from an electronic transaction device" because the receive circuit is certainly there to receive something, and it is clear from some of the claims that "something" is card information, and therefore it must receive it from a device, and since the device holds information relating to electronic transactions, it is therefore an electronic transaction device. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to adapt the POS interface recited in claim 1 of 09/587,998 to transit the card information received from the receive circuit (and, in turn, from the electronic transaction device), because that is the purpose of the recited "adapter for use with point of sale card readers" as understood from the claim as a whole.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

*Claim Rejections - 35 USC § 102*

5 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10 (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

15 Claims 1-3, 7, and 18-20, are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by U.S. Patent #5,955,961 to Wallerstein ("Wallerstein" hereinafter). Wallerstein discloses an adapter for use with point of sale card readers, the adapter comprising:

20 a) a housing 10, including at least a reader-insertable portion capable of being inserted in the card reader;

b) a receive circuit (e.g. smart card integrated circuit) in the housing, the receive circuit adapted to receive information from an electronic transaction device (see column 5, lines 60-65; an ordinary ISO 7816 smart card has contacts on the card to send and receive information, i.e. "communicate with a standardized 'smart card' reader");

25 c) a processor in the housing connected to the receive circuit (by definition, a "smart card" contains a "processor"); and

30 d) a point of sale interface in the reader insertable portion of the housing connected to the processor, the point of sale interface adapted to transmit information received from the electronic device (a smart card can communicate with an ordinary POS reader; this is described throughout the patent, and especially in the background of the invention).

Re claims 2-3, in figure 2, Wallerstein describes a standard credit card thickness, which is understood to have an entire housing which is "reader insertable". Note that figure 3 is an alternative embodiment.

5           Claims 1-3, 7-8, 11, and 18-20 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by U.S. Patent 4,701,601 to Francini et al. ("Francini" hereinafter). discloses an adapter for use with point of sale card readers, the adapter comprising:

a) a housing 20, including at least a reader-insertable portion capable of being inserted in the card reader;

10          b) a receive circuit (22) in the housing, the receive circuit adapted to receive information from an electronic transaction device;

c) a processor 24 in the housing connected to the receive circuit; and

d) a point of sale interface 26 in the reader insertable portion of the housing connected to the processor, the point of sale interface adapted to transmit information received from the electronic  
15          device.

### ***Claim Rejections - 35 USC § 102/103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

20          (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25           This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly  
30           owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by, or alternatively under 35 U.S.C. § 103 as being unpatentable over U.S. Patent #5,590,038 to Pitroda (" '038 " hereinafter). '038 discloses an adapter (CIU) for use with point of sale card readers, the adapter comprising:

- 5 a) a housing (see figure 5), including at least a reader-insertable portion capable of being inserted in the card reader (55, 56, etc. Because Applicant does not specify a distinguishing feature of a "card reader", of which there are very many known types, Examiner reads the claim broadly, and finds that known readers, or obvious variations thereof, would have portions which would receive an insertable portion of the CIU taught by '038, such as a telephone line jack or serial interface
- 10 port);
- b) a receive circuit in the housing (metal contacts for reading UET card are disclosed), the receive circuit adapted to receive information from an electronic transaction device (see column 12, lines 52-55);
- c) a processor in the housing connected to the receive circuit (see column 13, line 16); and
- 15 d) a point of sale interface (either phone jack, serial interface or other "POS" interconnect known in the art) in the reader insertable portion of the housing connected to the processor, the point of sale interface adapted to transmit information received from the electronic device. The Examiner finds that the CIU disclosed by '038a comprises a portion insertable into known readers. A common phone plug would be an example. At the end of the CIU taught by '038 would be a
- 20 phone plug that would plug into a phone jack so that the card information could be transmitted. This is the purpose of the CIU of '038. Whatever the phone jack plugs into becomes a POS device by definition, at some point, because it allows an electronic transaction to take place. Therefore, a phone plug on CIU which is insertable to a phone jack to make a transaction possible meets the limitations of the claims. Alternatively, if a third party were to find that no "insertable"
- 25 portion is expressly disclosed in '038, Examiner would argue that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to form an insertable portion of the CIU taught by '038 insertable into a reader because this would allow the necessary electronic connections to be made in a standard way according to standard industry practices. Common examples are the RJ11 telephone jack familiar to most office workers in the United

States including most patent examiners and most attorneys, and the common RS 232 serial port found on the back of every computer used by patent examiners for the past 7 years, and practically every personal computer used by a patent attorney to file patent applications for the last 20 years. Other examples well known in the art would be magnetic stripe emulators, and ISO  
5 7816 compliant smart card interfaces/emulators. See column 12, line 60.

Re claim 11, the CIU must also transmit information to the card if the UET is to be "capable of receiving personal and transactional information," as described in the summary of the invention at lines 46-47 and elsewhere.

10 Claims 2 are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent #5,590,038 to Pitroda (" '038 " hereinafter). '038 discloses an adapter (CIU) for use with point of sale card readers, the adapter

15 Claims 4-6, 9-17, 21-37 and 39 are rejected under 35 U.S.C. § 103 as being unpatentable over Wallerstein.

Re claims 4-5, Wallerstein discloses a magnetic stripe emulator, which is disclosed as a point of sale interface adapted to transmit transaction information. Wallerstein discloses that the adapter 10 is programmable, and teaches various I/O interfaces, such as I/O interface 19, but does not teach the exactly how the device receives programming signals from the outside world. It  
20 would have been obvious at the time the invention was made to a person having ordinary skill in the art to program the Wallerstein device 10 through I/O port 19 because Wallerstein teaches that transaction information must be stored in the device 10, and I/O port 19 is one means to insert information into the adapter 10, and receive confirmation that the information is stored accurately. I/O interface 19 is clearly an electronic interface. Any electronic device which sends or receives  
25 transaction information through I/O port 19 is necessarily an electronic transaction device.

Re claim 6, duplication of parts is, in this instance, an obvious variation. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a plurality of electromagnets in order to provide multiple regions of magnetic stripe emulation, so that either redundancy for reliability, or multiple stripes, or multiple regions within a



stripe can be covered by the emulation function, because redundancy for reliability is a common consideration, the magnetic stripe region is known to traverse the entire card, and known international standards use multiple stripe regions, that are in physically distinct locations on the card.

5 Re claims 9-11, 21-22, the claims recite commonly known I/O. Wallerstein teaches I/O port 53, for which it would have been obvious to use any of the recited technologies to transmit data, because these technologies all have well known advantages.

Re claims 12, Official Notice is taken that data buffers are old and well known in the art. See In Re Malcolm 1942 C.D.589:543 O.G. 440. It would have been obvious at the time the  
10 invention was made to a person having ordinary skill in the art to provide data buffers connected to the processor because the processor may be busy doing other tasks at the instant the data arrives, or is due to be output. This is a fundamental part of most computer systems.

Re claim 13, 16, 23, Official Notice is taken that time out circuits are old and well known in the art. See In Re Malcolm 1942 C.D.589:543 O.G. 440. It would have been obvious at the  
15 time the invention was made to a person having ordinary skill in the art to provide a time out circuit to the Wallerstein invention, because this would save battery power, as is well known in the art. This would function such that the data buffer would be purged (turned off, and the data erased) after a predetermined period of time.

Re claim 14, 17, 24 data is typically purged from a buffer after one data operation.

20 Re claims 25-28, 31 while Wallerstein does not disclose the exact method, the recited steps follow from the disclosure in an obvious manner. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the Wallerstein device to effect the method recited by Applicant because this is the intended use of Wallerstein, as is apparent from a fair reading of the disclosure.

25 Re claims 29-30, this follows directly from the teachings of conventional smart cards, and the ISO 7816 card standards.

Re claims 32-35, the transaction is programmed into the card, as described above. As taught in column 7, lines 52-60, the information would be stored temporarily. As described above, buffers are common means for accomplishing this goal.

Re claims 36-37 the I/O interface would typically transmit information, including confirmation information (e.g. conformation that transaction information is written properly.)

Re claim 39, see column 7, lines 52-60.

5           Claim 38 is rejected under 35 U.S.C. § 103 as being unpatentable over Wallerstein in view of '038. Wallerstein teaches an adapter combination as described above, but does not teach that the adapter may send a receipt to the electronic transaction device. '038 teaches an electronic transaction device in which an electronic transaction device, e.g. a smart card, can interface with the adapter. It would have been obvious at the time the invention was made to a person having  
10           ordinary skill in the art to combine the adapter taught by Wallerstein with the interface to an existing Universal Transaction Card taught by '038 because this would be a means for programming the card taught by Wallerstein with existing transaction information. Wallerstein does not focus on the problem of getting transaction information into the adapter. According to this combination, a smart card could be connected to the adapter taught by Wallerstein. As smart  
15           cards typically must be updated with account/history information, the adapter would have to supply the smart card with a receipt. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to supply a UET taught by '038 from the adapter taught by Wallerstein because the adapter taught by Wallerstein emulates smart cards, which typically provide reciepts to the smart card device.

20           Claims 25-31, are rejected under 35 U.S.C. § 103 as being unpatentable over Francini.

          Re claims 25-31 while Francini does not disclose the exact method, the recited steps follow from the disclosure in an obvious manner. It would have been obvious at the time the  
25           invention was made to a person having ordinary skill in the art to use the Francini device to effect the method recited by Applicant because this is the intended use of Francini, as is apparent from a fair reading of the disclosure.

*Response to Arguments*

Applicant argues that Wallerstein does not allow the user to select from various accounts and to emulate a magnetic stripe. This is plainly not in accordance with a fair reading of the  
5 Wallerstein reference. Examiner has provided further mapping/explanation in the rejections to support Examiner's position with respect to Wallerstein.

Applicant argues that Francini does not disclose the receive circuit adapted to receive information from an electronic transaction device. The Examiner respectfully disagrees. As should  
10 be apparent from the explanations given above, the smart card interface meets the limitations of the claims. Applicant's attention is further drawn to Applicant's own specification at page 20, lines 18-20. Applicant's own claims must be interpreted in light of this and other passages.

Applicant argues that the newly amended claims define over '038. It is believed that the newly reformulated rejections adequately convey the Examiner's position with respect to '038 to  
15 address Applicant's arguments.

*Voice*

Inquiries for the Examiner should be directed to Mark Tremblay at (703) 305-5176. The Examiner's regular office hours are 10:30 am to 7:00 pm EST Monday to Friday. Voice mail is  
20 available. If Applicant has trouble contacting the Examiner, the Supervisory Patent Examiner, Vincent Millin, can be reached on (703) 308-1065. Technical questions and comments concerning PTO procedures may be directed to the Patent Assistance Center hotline at 1-800-786-9199 or (703) 308-4357.

  
**MARK TREMBLAY**  
**PRIMARY EXAMINER**

July 16, 2001